

OPINIONS AND DECLARATIONS RENDERED BY THE INTER- NATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E.

Secretary to the Commission

VOLUME 12. Part 22. Pp. 393—418

OPINION 399

Designation, under the Plenary Powers, of a type species in harmony with accepted nomenclatorial practice for the genera *Lachnus* Burmeister, 1835, and *Cinara* Curtis, 1835 (Class Insecta, Order Hemiptera)



LONDON :

Printed by Order of the International Trust for
Zoological Nomenclature
and

Sold on behalf of the International Commission on Zoological
Nomenclature by the International Trust at its Publications Office
41, Queen's Gate, London, S.W.7
1956

Price Fifteen Shillings

(All rights reserved)

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

COMPOSITION AT THE TIME OF THE ADOPTION OF THE RULING GIVEN IN OPINION 399

A. The Officers of the Commission

Honorary Life President : Dr. Karl Jordan (*British Museum (Natural History), Zoological Museum, Tring, Herts, England*)

President : Professor James Chester Bradley (*Cornell University, Ithaca, N.Y., U.S.A.*)
(12th August 1953)

Vice-President : Senhor Dr. Afranio do Amaral (*Sao Paulo, Brazil*) (12th August 1953)

Secretary : Mr. Francis Hemming (*London, England*) (27th July 1948)

B. The Members of the Commission

(Arranged in order of precedence by reference to date of election or of most recent re-election as prescribed by the International Congress of Zoology)

Professor H. BOSCHMA (*Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands*)
(1st January 1947)

Senor Dr. Angel CABRERA (*La Plata, Argentina*) (27th July 1948)

Mr. Francis HEMMING (*London, England*) (27th July 1948) (*Secretary*)

Dr. Henning LEMCHE (*Universitetets Zoologiske Museum, Copenhagen, Denmark*) (27th July 1948)

Professor Teiso ESAKI (*Kyushu University, Fukuoka, Japan*) (17th April 1950)

Professor Pierre BONNET (*Université de Toulouse, France*) (9th June 1950)

Mr. Norman Denbigh RILEY (*British Museum (Natural History), London*) (9th June 1950)

Professor Tadeusz JACZEWSKI (*Institute of Zoology, Polish Academy of Sciences, Warsaw, Poland*) (15th June 1950)

Professor Robert MERTENS (*Natur-Museum u. Forschungs-Institut Senckenberg, Frankfurt a. M., Germany*) (5th July 1950)

Professor Erich Martin HERING (*Zoologisches Museum der Humboldt-Universität zu Berlin, Germany*) (5th July 1950)

Senhor Dr. Afranio do AMARAL (*S. Paulo, Brazil*) (12th August 1953) (*Vice-President*)

Professor J. R. DYMOND (*University of Toronto, Toronto, Canada*) (12th August 1953)

Professor J. Chester BRADLEY (*Cornell University, Ithaca, N.Y., U.S.A.*) (12th August 1953) (*President*)

Professor Harold E. VOKES (*Johns Hopkins University, Baltimore, Maryland, U.S.A.*)
(12th August 1953)

Professor Béla HANKÓ (*Mezőgazdasági Museum, Budapest, Hungary*) (12th August 1953)

Dr. Norman R. STOLL (*Rockefeller Institute for Medical Research, New York, N.Y., U.S.A.*) (12th August 1953)

Mr. P. C. SYLVESTER-BRADLEY (*Sheffield University, Sheffield, England*) (12th August 1953)

Dr. L. B. HOLTHUIS (*Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands*)
(12th August 1953)

Dr. K. H. L. KEY (*Commonwealth Scientific and Industrial Research Organisation, Canberra, A.C.T., Australia*) (15th October 1954)

Dr. Alden H. MILLER (*Museum of Vertebrate Zoology, University of California, U.S.A.*)
(29th October 1954)

Doc. Dr. Ferninand PRANTL (*Národní Museum v Praze, Prague, Czechoslovakia*) (30th October 1954)

Professor Dr. Wilhelm KÜHNELT (*Zoologisches Institut der Universität, Vienna, Austria*)
(6th November 1954)

Professor F. S. BODENHEIMER (*The Hebrew University, Jerusalem, Israel*) (11th November 1954)

OPINION 399

DESIGNATION UNDER THE PLENARY POWERS OF
A TYPE SPECIES IN HARMONY WITH ACCEPTED
NOMENCLATORIAL PRACTICE FOR THE
GENERA "LACHNUS" BURMEISTER, 1835,
AND "CINARA" CURTIS, 1835 (CLASS
INSECTA, ORDER HEMIPTERA)

RULING :—(1) The following action is hereby taken under the Plenary Powers :—

- (a) All designations or selections of type species for the genera *Lachnus* Burmeister, 1835, and *Cinara* Curtis, 1835, made prior to the present Ruling are hereby set aside.
- (b) The under-mentioned nominal species are hereby designated to be the type species respectively of the genera specified below :—
 - (i) *Aphis roboris* Linnaeus, 1758, to be the type species of *Lachnus* Burmeister, 1835 ;
 - (ii) *Aphis pini* Linnaeus, 1758, as defined by the Ruling given in *Opinion* 398, to be the type species of *Cinara* Curtis, 1835.

(2) The under-mentioned generic names are hereby placed on the *Official List of Generic Names in Zoology* with the Name Nos. 989 and 990 respectively :—

- (a) *Lachnus* Burmeister, 1835 (gender : masculine) (type species, by designation under the Plenary Powers under (1)(b)(i) above : *Aphis roboris* Linnaeus, 1758) ;
- (b) *Cinara* Curtis, 1835 (gender : feminine) (type species, by designation under the Plenary Powers under (1)(b)(ii) above : *Aphis pini* Linnaeus, 1758).

(3) The under-mentioned entries are hereby made on the *Official List of Specific Names in Zoology* :—

(a) The under-mentioned name is hereby placed on the foregoing *List* with the Name No. 696 :—
roboris Linnaeus, 1758, as published in the combination *Aphis roboris* (specific name of type species of *Lachnus* Burmeister, 1835) ;

(b) The following note is hereby added to the entry on the above *List* relating to the name *pini* Linnaeus, 1758, as published in the combination *Aphis pini*, made by the Ruling given in *Opinion* 398 :—“ (specific name of type species of *Cinara* Curtis, 1835) ”.

(4) The under-mentioned generic name is hereby placed on the *Official Index of Rejected and Invalid Generic Names in Zoology* with the Name No. 415 :—
Cinaria Baker, 1920 (an Invalid Subsequent Spelling for *Cinara* Curtis, 1835).

I. THE STATEMENT OF THE CASE

Early discussions : The question which forms the subject of the present *Opinion* was first brought to the notice of the Office of the Commission by Professor F. C. Hottes (then of the *James Millikin University, Decatur, Illinois, U.S.A.*) in a letter dated 24th February 1930, addressed to the late Dr. C. W. Stiles, at that time Secretary to the Commission. This letter and other documents of the same period were missing at the time of the transfer of the records of the Commission to Mr. Hemming consequent upon his election in 1936 to be Secretary to the Commission. Ultimately, however, these documents were recovered. A short account of these early discussions and of the course of events up to the submission in 1948 of the application

which forms the basis of the present *Opinion* was given in a Report prepared by Mr. Hemming in May 1951, from which the following passage is an extract :—

Extract from a Report on Professor F. C. Hottes' application regarding the generic names "Lachnus" Burmeister, 1835, and "Cinara" Curtis, 1835 (Class Insecta, Order Hemiptera) prepared for the information of the International Commission on Zoological Nomenclature by Mr. Francis Hemming as Secretary on 31st May 1951

(The Report, from which the following passage is an extract was published on 11th May 1954 (Hemming, 1954, *Bull. zool. Nomencl.* 9 : 184—187)

2. This question [i.e. the species to be accepted as the type species of the genera *Lachnus* Burmeister, 1835, and *Cinara* Curtis, 1835] was first raised informally in a letter dated 24th February 1930 addressed by Professor F. C. Hottes (then of the *James Millikin University, Decatur, Illinois, U.S.A.*) to the late Dr. C. W. Stiles, my predecessor in the Office of Secretary to the International Commission. In this letter Professor Hottes drew attention to the difficulties arising from the fact that the first valid type selection for *Lachnus* Burmeister, 1835, was that by Wilson (1910) who had then selected *Lachnus punctatus* Burmeister, 1835, whereas the species commonly accepted as the type species of this genus was *Lachnus fasciatus* Burmeister, 1835, selected a year later (1911), also by Wilson. At the same time Professor Hottes drew attention to the difficulties which existed also in determining the type species of the genus *Cinara* Curtis, 1835, in view of the fact that, when Curtis designated "*pini* Linnaeus" as the type species of this genus, he added a question mark after the word "Linnaeus", thereby throwing into doubt the action which he conceived himself to be taking. The correspondence which then ensued, did not lead to the submission of an application to the Commission.

3. Among the papers transferred to my charge on my becoming Secretary to the International Commission, I found references to a possible application to the International Commission on this subject but the actual documents handed over to me did not include any of the earlier correspondence relating to this case. When in 1944 I was able to turn my attention to this case, I wrote to Professor Hottes, referring to the correspondence which he had had on this subject with Dr. Stiles and asking whether he proposed to submit an application to the International Commission. At the same time I wrote to Dr. S. A. Rohwer (*Assistant Chief, Bureau of Entomology and Plant Quarantine, U.S. Department of Agriculture, Washington, D.C.*), to whom it

appeared (from other papers which had been transferred to me) that perhaps the earlier correspondence had been sent by Dr. Stiles ; I asked that, if this was so, these papers should be returned for incorporation in the records of the International Commission.

4. In October 1944 I received a letter from Professor Hottes, with which he enclosed a copy of a paper entitled "The name *Cinara* versus the name *Lachnus*", which he had written shortly after the correspondence with Dr. Stiles referred to in paragraph 2 above and which had been published in November 1930 (*Proc. biol. Soc. Wash.* 43 : 185—188). In that paper Professor Hottes had set out the grounds which, as he then believed, justified the conclusion that Westwood (1840) had effectively selected *Aphis roboris* Linnaeus, 1758, to be the type species of the genus *Lachnus* Burmeister, 1835, and that Curtis (1835) had validly designed *Aphis pini* Linnaeus, 1758, to be the type species of the genus *Cinara* Curtis, 1835. Professor Hottes went on to say that he recognised that in a matter of this kind the opinion of an individual specialist possessed no official status ; he suggested, therefore, that the International Commission should review the findings which he had reached and, having done so, should render an *Opinion* on the questions at issue. Professor Hottes added that he would be happy to present to the Commission a bibliography of the literature involved and to submit recommendations for the consideration of the Commission.

5. In December 1944 I received a letter from Dr. Rohwer enclosing the earlier correspondence relating to this case which, as I had anticipated, had been filed in the records of the U.S. Department of Agriculture

2. The application submitted by Professor F. C. Hottes (Grand Junction, Colorado, U.S.A.) : In September 1944, Mr. Hemming, as Secretary, entered into correspondence with Professor F. C. Hottes (who by now was resident at *Grand Junction, Colorado, U.S.A.*) with a view to arranging for the submission by him of a definitive application asking the Commission to give a Ruling on the long-outstanding question of the species to be accepted as the type species of the genera *Lachnus* Burmeister, 1835, and *Cinara* Curtis, 1835, respectively. This led in November 1948 to the submission by Professor Hottes of an application on the above subject, together with an application asking for a Ruling as to the interpretation of the nominal species *Aphis pini* Linnaeus, 1758. This latter question, though entirely distinct from that relating to the type species of the genera *Lachnus* and *Cinara*, was nevertheless closely bound up with that question owing to

the attempt made by Curtis in 1835 to designate *Aphis pini* Linnaeus as the type species of his new genus *Cinara*. Subsequent to the receipt of these applications the two problems involved were dealt with concurrently by the Commission at every stage. The decision on the interpretation of the nominal species *Aphis pini* Linnaeus has been embodied in *Opinion* 398, the *Opinion* immediately preceding the present *Opinion*. Various decisions of a procedural character taken in Paris in 1948 by the Thirteenth International Congress of Zoology involved a certain amount of revision in the case of all applications then awaiting consideration by the Commission. Work on these revisions was begun in 1950 as soon as the Official Record of the decisions taken in Paris had been published. In the present case the required revision was completed on 18th June 1951, on which date the following application was submitted by Professor Hottes :—

Proposed use of the Plenary Powers to designate, as the type species of "Lachnus" Burmeister, 1835, and "Cinara" Curtis, 1835 (Class Insecta, Order Hemiptera) a species in harmony with accepted nomenclatorial practice

By F. C. HOTTES

(Grand Junction, Colorado, U.S.A.)

Much confusion has arisen among Aphid taxonomists in connection with the generic names *Lachnus* Burmeister, 1835, and *Cinara* Curtis, 1835. Both these names were first published in the same year and it has not been found possible to establish with certainty the relative priority to be assigned to them. These two nominal genera have been treated as representing the same taxonomic genus, and the genus *Cinara* has been treated as a junior synonym of *Lachnus*, notwithstanding the fact that the priority of these names in relation to one another was not definitely established. Both genera have been treated as having the same species as their respective type species, though incorrectly so. Moreover, the name *Lachnus* has until recently been associated with a group of aphids generically different from that to which is referable the species which under the Rules is the valid type species of that genus. Furthermore, the species which was designated as the type species of *Cinara* was distinguished by the addition of a question mark inserted after the author's name, a procedure on the part of Curtis which naturally casts a cloud on the identity of the species so designated.

2. In the belief that this state of confusion should be brought to an end with as little further delay as possible, the present application has

been prepared for the purpose of presenting the available facts to the International Commission on Zoological Nomenclature and thereby of securing an authoritative ruling for the guidance of present and future taxonomists.

(a) The generic name " *Lachnus* " Burmeister, 1835

3. In 1835 (on a date which is not precisely known) Burmeister published his generic name *Lachnus* (*Handbuch der Entomologie* 2 : 91), which he attributed to Illiger. In this connection it is interesting to note the following statement entered in long hand at the bottom of page 91 in a copy of the second volume of Burmeister's *Handbuch* which I have examined: " Illiger never described the genus *Lachnus*, which he had put in manuscript. Burmeister adopted the name, credited it to Illiger, and described the genus ". (Theo. Pergande.) This statement is similar to one sent to me in 1930 by the late Dr. Walther Horn. Both authorities agree with the generally held opinion that Illiger did not describe the genus, so that the name *Lachnus* should be credited to Burmeister. (It should be recalled at this point that in 1948 the International Congress of Zoology decided to insert in the Code a provision that, where a name has gained an irregular currency through having been in use in manuscript, that name is to be attributed to the first author by whom it is validly published with an indication and it is to rank for the purposes of priority from the date on which it is first so published—see 1950, *Bull. zool. Nomencl.* 4 : 259.)

4. Westwood in 1840 (2 : 118) selected *Aphis roboris* Linnaeus, 1758 (*Syst. Nat.* (ed. 10) 1 : 452) as the type species of *Lachnus* Burmeister, no species having been so designated or indicated at the time of the original publication of this generic name. This selection was, however, invalid, because *Aphis roboris* Linnaeus was not one of the nominal species included in the genus *Lachnus* by Burmeister when he first published the name *Lachnus*.

5. Schumacher in 1921 (*Zool. Anz.* 53 : 185—186) attempted to establish the proposition that *Aphis roboris* Linnaeus was the type species of *Lachnus* Burmeister, by citing from the second edition of Burmeister's *Handbuch der Entomologie* (2 : 1006), where Burmeister stated that his *Lachnus fasciatus* of 1835 (*Handb. Ent.* 2(1) : 93) was a synonym of *Cinara roboris* (Linnaeus) and therefore became a synonym of *Aphis roboris* Linnaeus, as identified by Fabricius. It is significant that Burmeister here made use of the generic name *Cinara* and it should be noted also that he did not treat it as a synonym of *Lachnus*. This was in the year before that in which Westwood selected *Aphis roboris* Linnaeus as the type species of *Lachnus* Burmeister. However, *Aphis roboris* Linnaeus was not eligible for selection as the

type species of *Lachnus* Burmeister, since it is not one of the nominal species cited by Burmeister when he first published that generic name. The fact that at a later date Burmeister treated the name *Lachnus fasciatus* Burmeister as a junior synonym of *Aphis roboris* Linnaeus is totally irrelevant for the purposes of Article 30. It does not alter in any way the fact that (as explained in paragraph 4 above) Westwood's action in 1840 in selecting *Aphis roboris* Linnaeus as the type species of *Lachnus* Burmeister was invalid.

6. In 1860 Passerini (*Gli Afidi con un Prospetti dei Generi ed alcune Specie nuova italiana* : 29) indicated that he considered that *Lachnus pinicola* Kaltenbach, 1843 (*Mon. Fam. Pflanzenläuse* : 154, 155) was typical of *Lachnus* Burmeister. It might be argued that his action on this occasion constituted a clear selection of that species as the type species (under Rule (g) in Article 30), but it is not necessary to consider this question in detail, for in 1863 Passerini (*Arch. Zool. Anat. Fisiol.* 2(2) : 185) unequivocally selected the above species as the type species of *Lachnus* Burmeister. Passerini's action was, however, invalid, for the species (*Lachnus pinicola* Kaltenbach) was not one of the nominal species included by Burmeister in the genus *Lachnus* at the time when he first published that generic name. Kaltenbach's *pinicola* had, indeed, not even been described at that time.

7. In 1909 Mordvilko (*Annu. Mus. zool. Acad. Sci. St. Petersburg.* 13 : 374) selected *Lachnus nudus* De Geer as the type species of *Lachnus* Burmeister. This selection, like those discussed above, was invalid, since the species selected was not one of those included by Burmeister at the time when he first published the generic name *Lachnus*.

8. In 1910 Wilson (*Ent. News* 21 : 151) selected *Lachnus punctatus* Burmeister, 1835, as the type species of the genus *Lachnus* Burmeister. This is one of the nominal species originally included in the genus *Lachnus* at the time when that generic name was first published and it is the first species to have been selected as the type species of this genus. Wilson's action was therefore perfectly valid (under Rule (g) in Article 30) and the nominal species *Lachnus punctatus* Burmeister is therefore, under the *Règles* the type species of the genus *Lachnus* Burmeister, 1835. It must be noted, however, that, at the time when Wilson made the foregoing type selection, the identity of the taxonomic species represented by the nominal species *Lachnus punctatus* Burmeister was unknown.

9. Wilson reverted to this subject in 1911 (*Ann. ent. Soc. Amer.* 4 : 51—54) in a paper in which he pointed out that there was a possibility that the species represented by the nominal species *Lachnus punctatus* Burmeister might be the same as that represented by the nominal species *Aphis viminalis* Boyer de Fonscolombe, 1841 (*Ann. Soc. ent. France* 10(3) : 184), which Mordvilko had designated as the type species of the genus *Tuberolachnus* Mordvilko, [1909] (*Annu.*

Mus. zool. Acad. St. Petersb. 13 : 374). In the light of these considerations, Wilson sought to select *Lachnus fasciatus* Burmeister, 1835 (*Handb. Ent.* (1) : 93) as the type species of *Lachnus* Burmeister. Wilson's action in this matter was naturally invalid, since he himself had in 1910 validly selected *Lachnus punctatus* Burmeister as the type species of this genus. At the time when he attempted to change the type species of *Lachnus* in this way Wilson was unaware that the true identity of the species represented by the nominal species *Lachnus fasciatus* Burmeister was still unknown and he could not guess that that species would turn out to be *Aphis roboris* Linnaeus. There is little doubt that at that time Wilson interpreted the nominal species *Lachnus fasciatus* Burmeister in the same manner as del Guercio who in 1909 (*Redia* 5(2) : 294—296) had described in considerable detail a species which he had identified with Burmeister's nominal species *Lachnus fasciatus*. Subsequent events have shown, however, that the species so identified by del Guercio with Burmeister's *fasciatus* was an entirely different species. There is therefore no doubt that, when citing the name *Lachnus fasciatus* Burmeister, as the name of the type species of the genus *Lachnus*, Wilson had in mind not the true *fasciatus* of Burmeister but a different species misidentified by him therewith. Nevertheless, under the *Règles* as clarified by the Paris Congress (see 1950, *Bull. zool. Nomencl.* 4 : 158), his action would have constituted a valid selection of the true *Lachnus fasciatus* of Burmeister, if a valid type selection had not already been made for the genus *Lachnus*, for under the decision noted above an author is to be assumed, for the purposes of Article 30, to have correctly identified a species selected by him to be the type species of a previously established genus. This question does not, however, arise in the present case, since (as shown in paragraph 8 above) a different nominal species, *Lachnus punctatus* Burmeister, had already been validly selected to be the type species of the genus *Lachnus*. Most Aphid workers today identify the nominal species *Lachnus viminalis* Boyer with *Lachnus punctatus* Burmeister and accordingly treat the trivial name *viminalis* Boyer as a junior synonym of the name *punctatus* Burmeister. Further, it is now generally considered that the species represented by the nominal species *Lachnus punctatus* Burmeister is the same as that represented by the nominal species *Aphis saligna* Gmelin, 1790 (in Linnaeus, *Syst. Nat.* (ed. 13) 1(4) : 2209), the specific name *punctatus* Burmeister being sunk therefore as a junior synonym of the name *saligna* Gmelin. It should be noted also that some Aphid workers consider the genus *Tuberolachnus* Mordvilko, [1909], as identical with the genus *Pterochlorus* (emend. of *Pterochlorus*) Rondani, 1848 (*N. Ann. Sci. nat. Bologna*[2] 9 : 35), the type species of which is *Aphis roboris* Linnaeus (the first species to have been selected, though invalidly, as the type species of *Lachnus* Burmeister).

10. In 1913 (*Tidschr. Ent.* 56 : 153) Van der Goot selected *Aphis juniperi* De Geer, 1773 (*Mém. Hist. Ins.* 3 : 2, 156) as the type species of *Lachnus* Burmeister, but that selection was of course invalid for,

quite apart from the fact that a valid type-selection (of *Lachnus punctatus* Burmeister) had already been made by Wilson in 1910, De Geer's nominal species *juniperi* was not one of Burmeister's original species. Very inconsistently, Van der Goot in the same paper (*loc. cit.* 56 : 74) cited also *Aphis nudus* De Geer, 1773, as the type species of this genus. This selection also is invalid, and for the same reasons. (It may be noted incidentally that De Geer never described a species under the above name, the name which he used being *Aphis nudi pini*.)

11. Baker in 1920 (*U.S. Dep. Agric. Bull.* 826 : 15—16), after reviewing the various type selections for the genus *Lachnus* Burmeister that had been made up to that time, came to the conclusion that the generic name *Lachnus* would be lost to Aphid workers, unless the identity of the nominal species *Lachnus punctatus* Burmeister could be established or the Rules were suspended in this case. In order to save the name *Lachnus*, Baker thereupon, in deliberate disregard of the Rules, adopted *Lachnus fasciatus* Burmeister as the type species of the genus *Lachnus*. At the same time he stated that an application would be submitted to the International Commission asking it to use its Plenary Powers to preserve the long-established use of the generic name *Lachnus*. I am informed, however, by the Secretary to the Commission that there is no trace in the archives of the Commission of any such application having been submitted. It is clear from Baker's paper that he followed del Guercio in his interpretation of the nominal species *Lachnus fasciatus* Burmeister (see paragraph 9 above) and therefore did not have in mind the true *Lachnus fasciatus* Burmeister, which (as already explained) is identical with *Aphis roboris* Linnaeus ; for he spoke of the media of the fore-wings of this species as being once-branched, whereas all known species of *Lachnus*, as universally understood, have the media of the fore-wings twice-branched. It is clear, therefore, that Baker's concept of the genus *Lachnus* Burmeister was not that of Burmeister himself or that of subsequent workers. Having accepted *Lachnus fasciatus* Burmeister, as interpreted by del Guercio, as the type species of the genus *Lachnus* Burmeister, Baker sank the generic name *Lachniella* del Guercio, [1909] (*Redia* 5 : 286) as a junior synonym of *Lachnus* Burmeister.

12. In 1931 in a paper entitled "El genotipo de *Lachnus* Burm. (Hemip. Aphid.)" Orfila (R.N.) selected *Lachnus lapidarius* (Fabricius) (= *Chermes lapidarius* Fabricius, 1803, *Syst. Rhyng.* : 306) as the type species of *Lachnus* (Orfila, 1931, *Rev. Soc. ent. argent.*, B. Aires 3 : 249—250). This is one of the species originally included in *Lachnus* by Burmeister. Schumacher in 1921 (*Zool. Anz.* 53 : 182—183) gave a synonymy for *Lachnus lapidarius* (Fabricius), and came to the conclusion that the species so named was the same as *Prociphilus xylostei* De Geer, 1773. If Orfila's selection of *Chermes lapidarius* Fabricius, as identified by Schumacher with *Aphis xylostei* De Geer,

as the type species of *Lachnus* were to be accepted, a new concept would be created for the nominal genus *Lachnus* Burmeister, and the name *Lachnus* would replace the name *Prociphilus* Koch, 1857 (*Die Pflanzenläuse Aphiden* 9 : 279). The objections to such a solution are obvious.

13. Börner & Schilder in 1932 (in Sorauer's *Handbuch der Pflanzenkrankheiten* (ed. 4) 5 : 568) considered that the species which del Guercio had identified with *Lachnus fasciatus* Burmeister was the same as *Cinara costata* (Zetterstedt).

14. It should be noted that Kaltenbach in 1843 (*Mon. Fam. Pflanzenläuse* : 148) listed both *Lachnus fasciatus* Burmeister and *Cinara roboris* (Curtis) as synonyms of *Aphis roboris* Linnaeus, 1758, which he assigned to the genus *Lachnus* Burmeister. Kaltenbach seems to have been the first author to have identified the nominal species *Lachnus fasciatus* Burmeister, 1835, with *Aphis roboris* Linnaeus, 1758, apart from Burmeister himself who in 1839 (*Handb. Ent.* 2(2) (2) : 1006) had sunk his own specific name *fasciatus* as a synonym of *roboris* Linnaeus. For some reason which it is impossible to explain, Kaltenbach went on to describe a different species under the name *Lachnus fasciatus* and credited that name, as used in this way, to Burmeister. Kaltenbach suggested that the species which he named in this way might turn out to be the same as *Aphis costata* Zetterstedt, 1828 (*Fauna Ins. lapp.* (1) : 559).

15. In Heft 7 of his *Die Pflanzenläuse Aphiden*, published in 1855, Koch, on page 226, treated both *Lachnus fasciatus* Burmeister and the *Cinara roboris* of Curtis as synonyms of *Dryobius roboris* (Linnaeus). Having done this, he then in Heft 8, published in 1857, proceeded, on page 237, to describe a species to which he applied the name *Lachnus fasciatus* Burmeister. Under this name he gave references both to the *Handbuch* of Burmeister and to Kaltenbach, and, like Kaltenbach, he suggested that this species might be identical with *Aphis costata* Zetterstedt, 1828. Koch illustrated this species by figures of alate and apterous viviparous females. The figure of the alate female shows the media of the forewings twice-branched ; moreover, the pigmented areas characteristic of *costata* Zetterstedt are lacking. However, in his description of the alate viviparous female Koch stated that the media were only once-branched ; he referred also to the presence of pigmented areas. We may, therefore, conclude that the species which he had before him was the *costata* of Zetterstedt and not the species to which Burmeister had given the name *fasciatus*.

16. Mordvilko (1895, *Zool. Anz.* 18 : 80—102) and Cholodkovsky (1898, *Hor. Soc. ent. ross.* 31 : 48—52) took different views as to the species identified by Kaltenbach and Koch with the nominal species *Lachnus fasciatus* Burmeister. Mordvilko held that Kaltenbach's

species was the same as that to which Cholodkovsky had given the name *Lachnus farinosus* (1891, *Rev. Sci. nat.* **1891** (No. 8) : 294—306) and spoke of that species as *Lachnus fasciatus* Kalt. He identified in the same way the species which Koch had identified as *Lachnus fasciatus* Burmeister. Cholodkovsky, on the other hand, held that the species which he had named *Lachnus farinosus* was not the same species as that which Kaltenbach had identified with *Lachnus fasciatus* Burmeister. Cholodkovsky then proceeded as follows :—“ Wenn also alle auf Nadelhölzern lebenden und mit dunkel gezeichneten Vorderflügeln versehenen *Lachnus*-Arten identisch sein sollen, so müssen sie alle *Lachnus costatus* Zett. heissen.”

17. Börner (1930, *Arch. klassif. phylogenet. Ent.* **1**(2) : 125) did not select a type species for the genus *Lachnus* ; he identified *Lachnus fasciatus* Burmeister with *Aphis roboris* Linnaeus and recognised that species as the type species of the genus.

18. In my paper on this subject published in 1930 (*Proc. biol. Soc. Wash.* **43** : 185—188) I followed the same course, identifying *Lachnus fasciatus* Burmeister with *Aphis roboris* Linnaeus and accepting that species as the type species of the genus *Lachnus* Burmeister.

19. Oestlund (1942, *Syst. Aphididae* (1) : 15—16) has also discussed this question. He followed Westwood in treating the generic name *Cinara* Curtis as a synonym of *Lachnus* Burmeister. His views on the type species of *Lachnus* are given in the following passage : “ The genus *Cinara*, published during the last month of the same year as *Lachnus*, has been shown to be a synonym of *Lachnus*, but this does not invalidate Curtis setting *Aphis pini* as type and the setting of the type to *Cinara* does not invalidate its application to *Lachnus* as having priority”. The “ *Aphis pini* ” which Oestlund had in mind is the species *Aphis pini* of Linnaeus, as interpreted by Goeze (1778) as is clearly indicated on the previous page of his paper.

20. We have now completed our review of the literature relating to the type species of the genus *Lachnus* Burmeister. Before discussing the action which it is desirable that the International Commission on Zoological Nomenclature should take in this matter, it will be convenient to consider the associated problem relating to the generic name *Cinara* Curtis, 1835.

(b) The generic name “ *Cinara* ” Curtis, 1835

21. Curtis published his description of the genus *Cinara* in Section 576 of Volume 12 of his *British Entomology*. The pages in this Section are not numbered. The date of publication of this Section was December 1835 and the plate accompanying it is dated 1st December.

Curtis described and figured *Aphis roboris* Linnaeus as belonging to his genus *Cinara*. In addition, he designated a type species for this genus. Unfortunately, however, in making this designation, Curtis cited his type species as follows: "*Aphis pini* Linn.?"

22. The fact that Curtis figured and described *Aphis roboris* Linnaeus as belonging to the genus *Cinara* has led some specialists to consider that species to be the actual type species of *Cinara*. Theobald (1929, *Plant Lice Gt. Brit.* 3 : 352), for example, expressed the following view, quoting from Laing: "The point is simply this, Curtis defines the genus *Cinara* and describes and figures *roboris*. Unfortunately, he says: 'Typical species: *Aphis pini*? Linnaeus'. It was obvious, therefore, he knew nothing about *pini* and that he had in mind for his genotype what he was figuring and describing, namely *roboris*. It is my contention that you cannot base genera on species you do not know and that in nomenclature you must interpret what a man obviously meant". It is not possible, however, to sustain the argument that Curtis did not have a clear idea of what *Aphis pini* Linnaeus was, for on the page following that on which the generic name *Cinara* first appeared he wrote: "Nos. 20 to 30 enumerated in the Guide with the exception of No. 29 belong to this genus". Reference to the Guide shows that *Aphis pini* Linnaeus was No. 22. It is perfectly clear, therefore, that Curtis considered the species *Aphis pini* Linnaeus (whatever he may have thought that species to be), belonged to his new genus *Cinara*. Thus, the nominal species *Aphis pini* Linnaeus is unquestionably the type species by original designation, if a satisfactory explanation can be found for the use by Curtis of a question mark, when he designated that species as the type species. Oestlund in 1942 (: 15—16) offered the following explanation of Curtis' action: "The mark is not an expression of doubt that *Aphis pini* is the type, but refers to the fact that *Aphis pini* is a composite that includes the two species found in Sweden that were named *Aphis nudi pini* and *tomentosa pini* by De Geer, 1773. Curtis questions which of these two should be the type according to the binominal method, recognising that De Geer persisted in following the vernacular method of naming species". One has to admit, however, that in a matter of this kind one guess is almost as good as another as to what Curtis meant by the question mark which he placed after the name of Linnaeus. In any case, Curtis' action in this matter must be considered as a flaw in his designation of *Aphis pini* Linnaeus to be the type species of *Cinara* Curtis, and action is needed to remove this defect.

23. In 1840 (*Introd. Class Ins.* 2 (Syn) : 118) Westwood, who may be expected to have been familiar with the respective dates of publication of the works in which Burmeister and Curtis published the generic names discussed above, placed the name *Cinara* Curtis as a synonym of the name *Lachnus* Burmeister. In doing so, he probably acted on the basis of his knowledge of the priority of the name *Lachnus*. This action by Westwood has also contributed to the confusion which has

occurred in regard to these two generic names. I can find no exact date for the appearance of Volume 2 of Burmeister's *Handbuch der Entomologie*, other than given on the title page, where the date is given as 1835, and a reference in the *Annales de la Société entomologique de France* (4 : cxiv), published in 1835, where it appears that the foregoing volume of Burmeister's *Handbuch* was published on some date between October 1st and December 31st, 1835. Burmeister himself (1836, *Archiv. für Naturgeschichte* 2 : 325) cited his *Handbuch* as having appeared in 1835.

24. Thus, on the meagre data available, it is possible that the name *Lachnus* Burmeister was published a few weeks before the name *Cinara* Curtis, for the Part containing the name *Cinara* is dated 1st December 1835, whereas, although it is possible that the name *Lachnus* was not published until the end of December 1835 (i.e. some four weeks after the publication of the name *Cinara*), it is possible also that it may have been published in 1835 as early as the beginning of October, i.e. two months before the publication of the name *Cinara*. As already observed (paragraph 22) it would be reasonable to expect that such an authority as Westwood, writing (in 1840) only five years after the publication of these names, would know which of the two names was the first to have been published, and the fact that he sank the name *Cinara* Curtis as a synonym of the name *Lachnus* Burmeister lends color to the view that the name *Lachnus* was published before the name *Cinara*. Up to 1948 the International Rules contained no provisions for determining the relative dates to be assigned, for the purposes of the Law of Priority, to names in cases where there was no definite evidence to show which of any given pair was the first to be published. In 1948 this defect in the Rules was remedied by the Thirteenth International Congress of Zoology when it was decided to incorporate in the *Règles* a series of provisions dealing with this subject, the general principle adopted being that in such a case each of the names concerned is to rank for the purposes of priority as from the earliest date as from which it is known with certainty to have been published, i.e. where a name is known to have been published between say 1st January and 15th February of a given year, it is to rank for the purposes of priority as from 15th February of the year in question, that being the earliest date as from which it is definitely known to have been published (see 1950, *Bull. zool. Nomencl.* 4 : 223—225). Applying these rules to the case here under consideration, we find (1) that 31st December 1835 is the earliest date by which it is known with certainty that the name *Lachnus* Burmeister was published and (2) that the name *Cinara* Curtis is to be treated as having been published on 1st December 1835, that date having been affixed to the portion of Curtis' book in which this name first appeared. We see therefore that under the *Règles* the name *Cinara* Curtis has several weeks priority over the name *Lachnus* Burmeister.

25. In 1910 (*Ent. News* 21 : 149) Wilson selected what he called "*pini* Curtis" to be the type species of *Cinara* Curtis. This action

was invalid, for, quite apart from the fact that Curtis had (although defectively) designated *Aphis pini* Linnaeus as the type species of this genus, Curtis never described a species under the specific name *pini* and there is therefore no such specific name as *pini* Curtis.

26. In 1911 (*Ann. ent. Soc. Amer.* 4 : 52—53) Wilson again discussed this subject, though without making any reference to his action in the previous year in selecting "*pini* Curtis" as the type species of this genus. He now rejected Curtis' selection of *Aphis pini* Linnaeus on account of the use by Curtis of a question mark, when so doing. Wilson thereupon suggested that *Aphis roboris* Linnaeus might be the species which should be regarded as being the type species, since this was the one species which Curtis described in full. In a footnote Wilson went on to make the following observation: "The question of the validity of this genus rests upon the fact that Curtis did not give *roboris* as the type and the other species is questioned. The author then concludes that the genus is in question and cannot be placed as a valid genus".

27. Baker, in 1920 (*U.S. Dept. Bull.* 826 : 15—18), without giving any discussion, gave the generic name *Cinara* Curtis (which he misspelt *Cinaria* and to which he attributed the erroneous date "1853") as a questionable synonym of *Eulachnus* del Guercio, 1911. In the same paper, when discussing the genus *Pterochlorus* Rondani, Baker rejected *Aphis roboris* Linnaeus as the type species of *Cinara* Curtis, following Wilson (1911) in believing that Curtis placed only two species in that genus when he first published its name, overlooking the reference by Curtis to the species enumerated in the "Guide". In this paper Baker recognised his nominal genus *Dilachnus* Baker, 1919 (*Canad. Ent.* 51 : 253) as a good genus and characterised it as having the media of the forewings twice-branched. Thus, he took care of the two species which he had excluded from the genus *Lachnus* when he selected as the type species of that genus a species in which the media were only once-branched.

28. Börner in 1930 (*Arch. Klassif. phylogenet. Ent.* 1(2) : 125) recognised *Aphis pini* Linnaeus as the type species of *Cinara* Curtis. I adopted the same course in my paper published in the same year (Hottes, 1930, *Proc. biol. Soc. Wash.* 43 : 185—186). While a student of Oestlund's, I was assigned by him the task of studying the synonymy of the generic names *Lachnus* and *Cinara* and the question of the type species of those genera. Oestlund could never bring himself to recognise the generic name *Cinara*, because he wished to retain the name *Lachnus* for species congeneric with *Aphis pini* Linnaeus, as witnessed by his last contribution, published in 1942 (: 15—16), in which he treated the name *Cinara* as a synonym of *Lachnus*.

(c) Conclusions

29. Having now brought to a close the story of the generic names *Lachnus* and *Cinara*, I turn to the question of the action which it is desired that the International Commission on Zoological Nomenclature should take in the present case. As the application now submitted will have shown, the generic names *Lachnus* Burmeister, 1835, and *Cinara* Curtis, 1835, are both very well-known names, but unfortunately the current use of the first of these names is entirely at variance with the provisions of the *Règles*, while, without a ruling from the International Commission, it is impossible to determine with certainty what species should, under the *Règles*, be regarded as the type species of the second of the nominal genera in question.

30. In the case of *Lachnus* Burmeister, the type species, under the *Règles*, is undoubtedly *Lachnus punctatus* Burmeister, 1835, that having been the first of the nominal species cited under the generic name *Lachnus* on the occasion when that name was first published, to have been selected (by Wilson, 1910) as the type species of this genus. The nominal species *Lachnus punctatus* Burmeister, 1835, is now subjectively identified with *Aphis seligna* Gmelin, 1789. On the other hand, the universally accepted type species for this genus is *Aphis roboris* Linnaeus, 1758, a nominal species not placed by Burmeister in the genus *Lachnus*, in which, however, he did include the nominal species *Lachnus fasciatus* Burmeister, 1835, which is now generally regarded as being subjectively identical with *Aphis roboris* Linnaeus. The substitution of *Lachnus punctatus* Burmeister for *Aphis roboris* Linnaeus as the type species of this genus would lead to great confusion, and is a change which it is essential should be prevented from occurring.

31. The generic name *Cinara* Curtis, 1835, has been widely used for the species identified as *Aphis pini* Linnaeus, 1758, and its allies, but, as already explained, the use by Curtis of a question mark, when designating that species as the type species of this genus has led to some workers to reject that type designation. Workers who have taken this view have regarded *Aphis roboris* Linnaeus, 1758, as the type species of *Cinara*, and, as those workers have also regarded that species as the type species *Lachnus* Burmeister, 1835, their action has had the effect of rendering (in their view) the nominal genera *Lachnus* and *Cinara* as objectively identical with one another and thus of making the names *Lachnus* Burmeister, 1835, and *Cinara* Curtis, 1835, objective synonyms of one another. Owing to the fact that these names were published at very nearly the same time, different views have been taken by workers as to which of these names should be treated as having priority over the other, there being until 1948 no provisions in the International Rules for determining the relative priority to be assigned in such circumstances to the names comprised in any given pair of names. Under the provisions inserted in the *Règles* by the Thirteenth International Congress of Zoology in 1948 it is now seen (paragraph 24 above) that the name *Cinara* Curtis possesses priority over the name *Lachnus* Burmeister.

32. The greatest confusion would ensue if the names *Cinara* Curtis and *Lachnus* Burmeister were to become synonyms of one another and it is one of the principal purposes of the present application to secure a settlement which will eliminate this risk. The basis of the settlement now asked for is the acceptance, under the Plenary Powers, (1) of *Aphis roboris* Linnaeus, 1758, as the type species of *Lachnus* Burmeister, 1835, and (2) of *Aphis pini* Linnaeus, 1758, as the type species of *Cinara* Curtis, 1835, for it is believed that it is only by this action that the long standing discussion of this subject can be brought to a satisfactory close. It is certain that, if no action were to be taken under the Plenary Powers and the *Règles* were to be strictly applied, the most serious confusion would be inevitable. In connection with the foregoing proposal, there is, it must be noted, a technical defect in the trivial name *pini* Linnaeus, 1758, as published in the combination *Aphis pini*, which will need to be remedied before the foregoing request can be granted. A recommendation on this subject is submitted to the International Commission in the immediately preceding application (Z.N.(S.) 547).¹

33. The specific proposals which are submitted to the International Commission on Zoological Nomenclature are that the Commission should :—

(1) use its Plenary Powers :—

- (a) to set aside all designations or selections of type species for the genera *Lachnus* Burmeister, 1835, and *Cinara* Curtis, 1835, made prior to the decision now proposed to be taken ;
- (b) to designate the under-mentioned species to be the type species of the genera referred to in (a) above :—

<i>Name of genus</i>	<i>Species recommended to be designated as the type species of the genera specified in Col. (1)</i>
(1)	(2)
(ii) <i>Lachnus</i> Burmeister, 1835	<i>Aphis roboris</i> Linnaeus, 1758
(ii) <i>Cinara</i> Curtis, 1835	<i>Aphis pini</i> Linnaeus, 1758 (defined, as recommended in application Z.N.(S.) 547 ¹)

¹ A decision has since been taken by the International Commission on the question here referred to. The decision so taken has been embodied in *Opinion* 398 (: 377—392 of the present volume).

- (2) place the generic names *Lachnus* Burmeister, 1835, and *Cinara* Curtis, 1835, with the type species severally specified in (1)(b) above, on the *Official List of Generic Names in Zoology* ;
- (3) place the specific name *roboris* Linnaeus, 1758, as published in the combination *Aphis roboris*, on the *Official List of Specific Names in Zoology* ;
- (4) place the name *Cinaria* Baker, 1920 (an Invalid Subsequent Spelling of *Cinara* Curtis, 1835), on the *Official Index of Rejected and Invalid Generic Names in Zoology*.

II. THE SUBSEQUENT HISTORY OF THE CASE

3. Registration of the present application : When in 1944 it became clear that at some past date some question relating to the names *Lachnus* and *Cinara* had been brought to the attention of the Office of the Commission, a Registered File bearing the Number Z.N.(S.) 174 was opened for this subject, and, when in 1948 Professor Hottes submitted a definite application on this question, the papers so received were placed in the foregoing File.

4. Support received prior to publication from Dr. C. F. W. Muesebeck (Division of Insect Identification, Bureau of Entomology and Plant Quarantine, U.S. Department of Agriculture, Washington, D.C., U.S.A.) : When, as explained in paragraph 1 of the present *Opinion*, Dr. S. A. Rohwer, *Assistant Chief, Bureau of Entomology and Plant Quarantine, U.S. Department of Agriculture, Washington, D.C., U.S.A.*) on 24th November 1944 returned the earlier papers relating to the present case, he submitted also a memorandum, dated 20th November 1944, prepared by Dr. C. F. W. Muesebeck (*Officer in Charge of the Division of Insect Identification of the Bureau*) in support of the action recommended by Professor Hottes. Dr. Muesebeck's memorandum, which was as follows, was reproduced in paragraph 5 of the Report on this case prepared by Mr. Hemming on 31st May 1951, which was published in the

Bulletin of Zoological Nomenclature on 11th May 1954 (Muesebeck, 1954, in Hemming, in *Bull. zool. Nomencl.* 9 : 185—186) :—

The case involving *Lachnus* and *Cinara* is not so easily settled. Following the exchange of correspondence between Hottes and Stiles, which is included among the papers I am returning, Hottes (*Proceedings Biological Society of Washington*, Vol. 43, p. 185, 1930) published a statement which indicated that he considered the question to have been entirely cleared up. The significant passage in his note reads as follows : “Schumacher (1921) clearly established the fact that *Aphis roboris* Linné was the correct type of the genus *Lachnus* by quoting from the second edition of Burmeister’s *Handbuch der Entomologie*, page 1006, wherein Burmeister states that his *Lachnus fasciatus* is a synonym of *Aphis roboris* Linné, the type set for *Lachnus* by Westwood in 1840”. Unfortunately, he overlooked the requirement that for *roboris* to be eligible for type designation, it must have been included among the species originally cited by Burmeister when he proposed the generic name *Lachnus*. The fact that Burmeister himself later suppressed his *fasciatus*, an originally included species, as a synonym of *roboris*, does not alter the case, and Westwood’s 1840 designation is invalid. The first valid type designation seems to be that by Wilson, 1910, who cited *punctatus* Burmeister, a species which was unrecognisable at that time but which has subsequently been made a synonym of *saligna* Gmelin, the type of *Tuberolachnus* Mordvilko, 1908. This generic name has been considered by most recent authors as a synonym of *Pterochlorus* Rondani, 1848, the type of which is *Aphis roboris*. If the zoological conclusions involving the specific names here are correct, *Pterochlorus* and *Tuberolachnus* are synonyms of *Lachnus*.

Cinara Curtis, 1835, was proposed with two included species, *Aphis pini* Linnaeus ? and *Aphis roboris*. Curtis himself definitely stated that “*pini* ?” was the type of his genus. It has been contended, however, that he did not know *pini* and that his description and illustrations applied to *roboris*. This is apparently correct. Theobald (*Aphididae of Great Britain*, Vol. 3, p. 352, 1929) quotes Laing on this point, whose concluding statement is : “It is my contention that you cannot base genera on species you do not know and that in nomenclature you must interpret what a man obviously meant”, and he supports Laing’s view. Accordingly, we have once more a troublesome problem resulting from the misidentification of a genotype. If the view held by Theobald and Laing is sustained by the Commission, the names *Lachnus* and *Cinara* are synonymous, but there still seems to be uncertainty as to which has priority, both having been published in 1835. If the Commission should agree with Theobald and Laing and then should find that *Lachnus* is the earlier name, some confusion would result from the necessity of treating, under *Lachnus*, the considerable number of *Aphids* now referred to the genus *Cinara*. It appears that greater stability would follow from the strict application of the Rules and the recognition of *pini* Linnaeus as type of *Cinara*.

5. Issue of Public Notices in 1947 : Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in the present case was given on 20th November 1947 in the manner prescribed by the Ninth International Congress of Zoology, Monaco, 1913, at the time of the grant of the Plenary Powers to the Commission by that Congress. The issue of these Public Notices elicited support from two specialists. Particulars of the communications so received are given in the immediately following paragraph. No objection to the action proposed was received from any source.

6. Support received from two specialists in response to the Public Notices issued in 1947 : Particulars of the communications in support of the present application submitted in response to the Public Notices issued in 1947 were given in paragraph 7 of the Report which, as already explained (paragraph 1 above), was prepared by Mr. Hemming as Secretary in May 1951 and which was published in the *Bulletin of Zoological Nomenclature* in May 1954 (Hemming, 1954, *Bull. zool. Nomencl.* 9 : 186). These particulars were as follows :—

- (1) **Professor Miriam A. Palmer** (*Colorado A. & M. College, Entomology Department, Fort Colorado, Colorado, U.S.A.*) stated (in a letter dated 13th January 1948) :—“ I am in full accord with both proposals under this file number ”.
- (2) **Mr. F. H. Jacob, M.Sc.** (*Ministry of Agriculture and Fisheries, National Agricultural Advisory Service, Welsh Sub-Centre, Bangor, United Kingdom*) reported (in a letter dated 10th November 1948) that, after the publication of the foregoing advertisement in *Nature*, he had had correspondence on this subject with Dr. Hille Ris Lambers, who had expressed the opinion (1) that the type species of *Lachnus* Burmeister was *Lachnus fasciatus* Burmeister (= *Aphis roboris* Linnaeus), by selection by Westwood (1840) and therefore that there was no need for the Plenary Powers to be used to secure this end ; (2) that “ *Cinara* Curtis 1835 type ‘ *pini* L. ? ’ is all right ” and that he could not therefore understand why it should be considered that a suspension of the Rules was necessary in this case. As regards the application advertised in *Nature*, Mr. Jacob said : “ From the point of view of one interested in Aphids, I consider that it is highly desirable that this proposal should be carried out ”. Mr. Jacob added : “ From the point

of view of an economic entomologist it is always a good thing to have these nomenclatorial problems straightened out and fixed once and for all, because it helps to avoid needless confusion of the literature”.

7. Question of principle involved in the present application : The application in regard to the names *Lachnus* and *Cinara* submitted by Professor Hottes involved incidentally a general question of principle in regard to the interpretation of Rule (a) in Article 30 in the *Règles*. The question so raised was whether a type designation lost its status under the foregoing Rule if any part of it were qualified by a mark of interrogation. In accordance with a decision taken by the Thirteenth International Congress of Zoology, Paris, 1948, that questions affecting the interpretation of the *Règles* should in future be dealt with in the *Declarations* Series and not as theretofore incidentally in *Opinions* dealing with individual names, arrangements were made in 1951 between Mr. Hemming as Secretary and Professor Hottes as the applicant that a request for a *Declaration* giving a Ruling on the question of interpretation referred to above should be submitted to the Commission by the Secretary simultaneously with the submission of Professor Hottes's application in regard to the names *Lachnus* and *Cinara*, for a decision by the Commission on the question of principle was an indispensable preliminary to obtaining a decision in regard to the species to be accepted as the type species under the *Règles* of the genus *Cinara* Curtis.

8. Publication of the present application and of the documents associated therewith : The present application was sent to the printer on 22nd November 1952, together with (i) the Report by the Secretary on the early history of the present case and (ii) the application for a *Declaration* interpreting Rule (a) in Article 30. Owing however to the need during 1953 for concentrating the resources of the Office of the Commission on the preparations for the Session of the Commission to be held at Copenhagen in July of that year and later on the arrangements for the publication of the decisions on nomenclature taken at Copenhagen, it was necessary temporarily to suspend the publication of Parts of the *Bulletin of Zoological Nomenclature* dealing with applications relating to the status of individual names and similar

matters. In consequence, it was not until 11th May 1954 that the foregoing documents were published in Part 6 of volume 9 of the *Bulletin of Zoological Nomenclature* (Hottes, 1954, *Bull. zool. Nomencl.* 9 : 174—183 ; Hemming, 1954, *ibid.* 9 : 184—187 (Report on early history of Professor Hottes's application) ; Hemming, 1954, *ibid.* 9 : 188—190 (application for a *Declaration* clarifying Rule (a) in Article 30)).

9. Issue of Public Notices in 1954 : Under the revised procedure prescribed by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, *Bull. zool. Nomencl.* 4 : 51—56) Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in the present case was given on 11th May 1954 (a) in Part 6 of volume 9 of the *Bulletin of Zoological Nomenclature* (the Part in which Professor Hottes's application was published) and (b) to the other prescribed serial publications. In addition, such Notice was given also to certain general zoological serial publications and to a number of entomological serials in Europe and America.

10. No objection received : The issue of the Public Notices specified in the preceding paragraph elicited no objection to the action proposed from any source.

III. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

11. Issue of Voting Paper V.P.(54)89 : On 26th November 1954, a Voting Paper (V.P.(54) 89) was issued in which the Members of the Commission were invited to vote either for, or against, " the proposal relating to the names *Lachnus* Burmeister, 1835, and *Cinara* Curtis, 1835, as set out in Points (1) to (4) on page 183 of volume 9 of the *Bulletin of Zoological Nomenclature* " [i.e. in the Points numbered as above in paragraph 33 of the application reproduced in the second paragraph of the present *Opinion*].

12. The Prescribed Voting Period : As the foregoing Voting Paper was issued under the Three-Month Rule, the Prescribed Voting Period closed on 26th February 1955.

13. Particulars of the Voting on Voting Paper V.P.(54)89 : At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(54)89 was as follows :—

(a) *Affirmative Votes had been given by the following twenty-one (21) Commissioners (arranged in the order in which Votes were received) :*

Holthuis ; Hering ; Lemche ; Stoll ; Bradley (J.C.) ; Vokes ; Esaki ; Bodenheimer ; Dymond ; Bonnet ; Boschma ; Miller ; Key ; Hankó ; Riley ; do Amaral ; Hemming ; Cabrera ; Kühnelt ; Jaczewski ; Sylvester-Bradley ;

(b) *Negative Votes :*

None ;

(c) *On Leave of Absence, two (2) :*

Mertens ; Prantl ;

(d) *Voting Papers not returned :*

None.

14. Declaration of Result of Vote : On 27th February, 1955, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(54)89, signed a Certificate that the Votes cast were as set out in paragraph 13 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.

15. Preparation of the Ruling given in the present "Opinion" : Simultaneously with the close of the Prescribed Voting Period for Voting Paper V.P.(54)89 (the Voting Paper relating to the names *Lachnus* and *Cinara* dealt with in the present *Opinion*), the corresponding Period closed for the Voting Papers concerned with two questions closely connected with the foregoing subject. These were : (a) Voting Paper V.P.(54)88, which was concerned with the interpretation of the nominal species *Aphis pini* Linnaeus, 1758, the species which in the present application Professor Hottes asked should be designated as the type species of *Cinara* Curtis, 1835² ; (b) V.P.(54)90, which was concerned with a request for a *Declaration* clarifying the meaning of Rule (a) in Article 30 on a point on which, as explained in paragraph 7 of the present *Opinion*³ it was necessary should be settled as a preliminary to the taking by the Commission of a decision in the case of the names *Lachnus* and *Cinara*. The adoption of the proposals submitted with Voting Papers V.P.(54)88 and 90 cleared the way for the grant by the Commission of approval for the proposals relating to the names *Lachnus* and *Cinara* submitted with Voting Paper V.P.(54)89. Accordingly, on 29th February 1956 Mr. Hemming prepared the Ruling given in the present *Opinion* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(54)89.

16. Original References : The following are the original references for the names placed on *Official Lists* and *Official Indexes* by the Ruling given in the present *Opinion* :—

Cinara Curtis, 1835, *Brit. Ent.* **12**(144) : No. 576

Cinaria Baker, 1920, *Bull. U.S. Dep. Agric.* No. 826 : 15

Lachnus Burmeister, 1835, *Handb. Ent.* **2** : 91

roboris, *Aphis*, Linnaeus, 1758, *Syst. Nat.* (ed. 10) **1** : 452

² The decision by the International Commission in regard to the determination of the nominal species *Aphis pini* Linnaeus, 1758, has been embodied in *Opinion* 398, which has been published in the immediately preceding Part of the present volume.

³ The interpretation of Rule (a) in Article 30 here referred to has been embodied in *Declaration* 22, which has been published as Part 12 of the present volume (: ix—xviii).

17. **Family-Group-Name Aspect** : The application dealt with in the present *Opinion* was submitted to the Commission several years before the establishment of the *Official List of Family-Group Names in Zoology*. It was not found possible to investigate this aspect of this case prior to the submission to the Commission of Voting Paper V.P.(54)89. This question is however now being examined on a separate file to which the Registered Number Z.N.(S.) 1113 has been allotted⁴.

18. The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.

19. The present *Opinion* shall be known as *Opinion* Three Hundred and Ninety-Nine (399) of the International Commission on Zoological Nomenclature.

DONE in London, this Twenty-Ninth day of February, Nineteen Hundred and Fifty-Six.

*Secretary to the International Commission
on Zoological Nomenclature*

FRANCIS HEMMING

⁴ A decision on this matter has since been taken by the International Commission and has been embodied in *Direction* 54, which will be published as Part 26 of the present volume.